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PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional)		
		DE040056US1		
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]	Application Number		Filed	
	10/598,004		05/10/2007	
on October 15, 2010	First Named Inventor			
Signature Patraia a Hein 7		Thomas Koehler		
	Art Unit	E	xaminer	
Typed or printed Patricia A. Heim name	3768		Hoffa, Angela Marie	
Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.  This request is being filed with a notice of appeal.  The review is requested for the reason(s) stated on the attached sheet(s).  Note: No more than five (5) pages may be provided.				
I am the				
applicant/inventor.		>/K	Signature	
assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)	Doug	llas B. McKnigk Typed	or printed name	
attorney or agent of record. Registration number 50, 47	440/4	83-2373		
		Telep	hone number	
attorney or agent acting under 37 CFR 1.34.	Octo	ber 15, 2010		
Registration number if acting under 37 CFR 1.34	_		Date	
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.				

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

\_\_\_\_\_ forms are submitted.

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re a	pplication of:	) Examiner: Angela Marie Hoffa
	Thomas KOEHLER et al.	)
		) Art Unit: 3768
Serial	No.: 10/598,004	)
		) Confirmation No.: 8994
Filed:	May 10, 2007	)
•		)
	February 15, 2005	)
	as PCT/IB2005/050576	)
		)
For:	DRUG APPLICATION	)
	DURING A CT SCAN	)
		) Cleveland, Ohio 44143
Attorr	ney Docket: PHDE040056US	)

### PRE-APPEAL BRIEF REQUEST FOR REVIEW

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir / Madam:

This Pre-Appeal Brief Request for Review is being filed contemporaneously with a Notice of Appeal concerning the August 2, 2010 Final Office Action in this application. It is respectfully submitted that the rejections of the independent claims 1, 8, 10 and 18 as being anticipated by U.S. Patent No. 6,397,098 to Uber III et al. ("Uber") are improper, for at least the two reasons identified below. The applicants reserve the right to present additional reasons why those particular rejections are improper, and/or why the rejections of other claims are improper, in any Appeal Brief or other arguments which may follow this Request.

### CERTIFICATE OF ELECTRONIC TRANSMISSION

I certify that this **PRE-APPEAL BRIEF REQUEST FOR REVIEW** in connection with U.S. Serial No. 10/598,004 is being filed on the date indicated below by electronic transmission with the United States Patent and Trademark Office via the electronic filing system (EFS-Web).

Oct 15 2010

Patricia A. Heim

## 1. Final Office Action Ignores Claim Limitation in Each Independent Claim Reciting "To Reduce Variations in the Heart Beat Rate"

Each one of the independent claims 1, 8, 10 and 18 requires, among other limitations, a controlled change of the heart beat rate of the patient "to reduce variations in the heart beat rate during the CT scan." The Final Office Action completely ignores that limitation in the rejections based on Uber. See August 2, 2010 Final Office Action, at 3 (incomplete analysis of claim 1) and at 4 (relying upon the incomplete analysis of claim 1 in rejecting claims 8, 10 and 18). The August 2, 2010 Final Office Action should be reconsidered and withdrawn on this basis alone. At the very least, a proper Final Office Action should identify the reason(s) why it is believed Uber discloses this claim limitation, so that the applicants can prepare a complete Appeal Brief in this regard if necessary.

# 2. Uber Fails to Disclose Claim Limitation Reciting "To Reduce Variations in the Heart Beat Rate"

Each one of the independent claims 1, 8, 10 and 18 requires, among other limitations, a controlled change of the heart beat rate of the patient "to reduce variations in the heart beat rate during the CT scan." As set forth in the specification, this has several benefits including for example avoidance of motion artifacts or a spatially varying temporal resolution (page 1, lines 16-29), and therefore an improved image quality (page 5, lines 25-27). Uber fails to disclose this claim limitation, for at least the following reasons.

Uber discloses the control of an appropriate dose of contrast agent during a medical imaging procedure. See Uber, col. 1, lines 12-40 and col. 2, lines 21-45. The contrast agent functions to enhance the contrast of the images generated by the imaging apparatus, such as an ultrasound apparatus. See Uber, col. 7, lines 17-65. According to Uber, vasodilator and vasoconstrictor drugs are administered during ultrasound cardiac stress echo imaging in conjunction with a heart rate monitor, so that when the heart rate reaches a target level the contrast agent injection process is initiated, terminated or adjusted, or scanner settings are adjusted. See Uber, col. 10, lines 25-65 and col. 10, line 66 to col. 11, line 21.

Thus, Uber discloses applying vasodilator and vasoconstrictor drugs while monitoring a patient's heart beat rate during an imaging scan to achieve a target heart beat rate. However, it does not disclose reducing variations in a heart beat rate. Rather, Uber simply discloses that once the

target heart beat rate is achieved <u>one or more of the imaging system or contrast agent injection</u> <u>parameters</u> is initiated, terminated or adjusted. Uber never discloses attempting to reach a target heart beat rate and, once achieved, reducing variations in the heart beat rate in an attempt to keep it steady.

#### Conclusion

It is respectfully submitted that the rejections of the independent claims 1, 8, 10 and 18 as being anticipated by U.S. Patent No. 6,397,098 to Uber III et al. ("Uber") are improper, for at least the two reasons identified above. It is therefore requested that the August 2, 2010 Final Office Action be withdrawn and this application be allowed. The applicants reserve the right to present additional reasons why those particular rejections are improper, and/or why the rejections of other claims are improper, in any Appeal Brief or other arguments which may follow this Request.

Respectfully submitted,

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